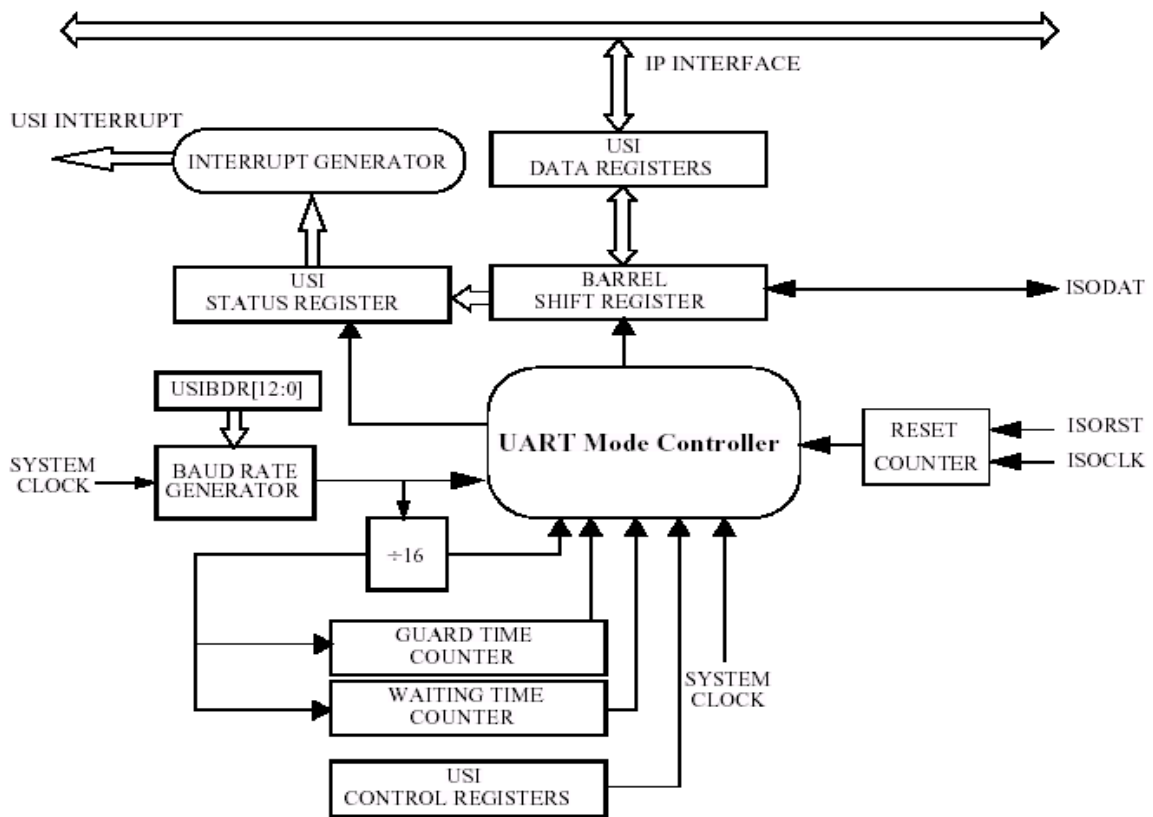


USI Module

Summary

The USI provides the interface to communication with smart card or smart card reader. It is compatible with ISO7816-3.



USI Block Diagram

Features

- Support of ISO7816-3
- Support both card and card reader mode
- Support T=0 and T=1 protocol
- Half-duplex operation
- 1 transmit buffer + 1 receive buffer
- 13-bit baud rate selection or F/D selection(11.625, 23.25, 46.5, 93, 186, 372, 744)
- Interrupt-driven operation with eight flags
 - ✓ Transmitter empty
 - ✓ Transmission complete
 - ✓ Receiver full
 - ✓ Receiver overrun
 - ✓ Noise error
 - ✓ Parity error
 - ✓ Timeout on WT counter
 - ✓ Answer to Reset
- 9-bit guard time counter (GTCNT)
- 24 bits waiting time counter (WTCNT)
- Auto-character repetition on error signal detection in transmit mode
- Auto-error signal generation on parity error detection in receive mode
- Hardware parity checking

Performance and Characteristics

- Frequency (WCS): 100 MHz
- Die Size: 0.058 mm²
- Process: 0.18μm (WCS, 1.62V, 120°)

Application Examples

- Smart Card
- Smart Card Reader

Availability

- Q2, 2003

To obtain more information about the USI or other C*Core™ products, please contact the C*Core Technology Co., Ltd. by phone: 0512-68091377, email: support@china-core.com or web: <http://www.china-core.com>.

C*Core™ is a trade mark of C*Core Co., Ltd.